Figure 1

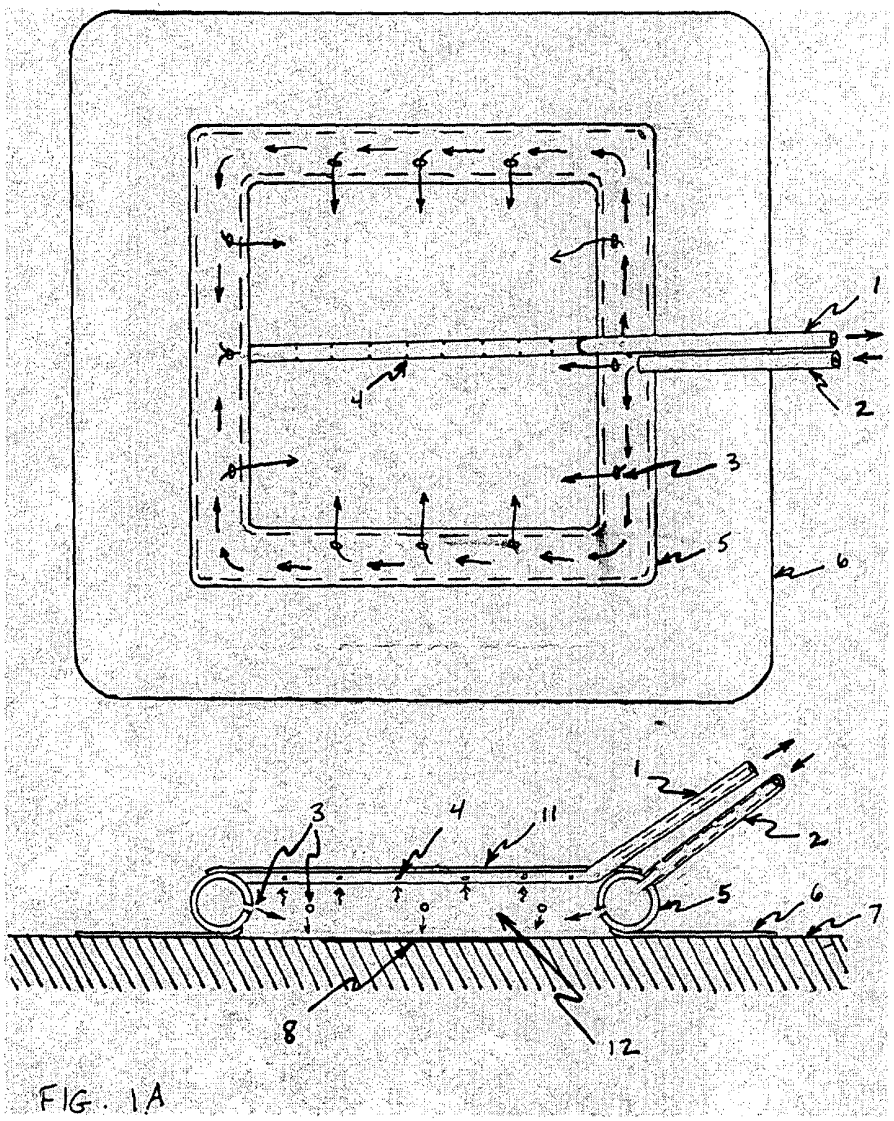


FIG. 1A

Figure 2

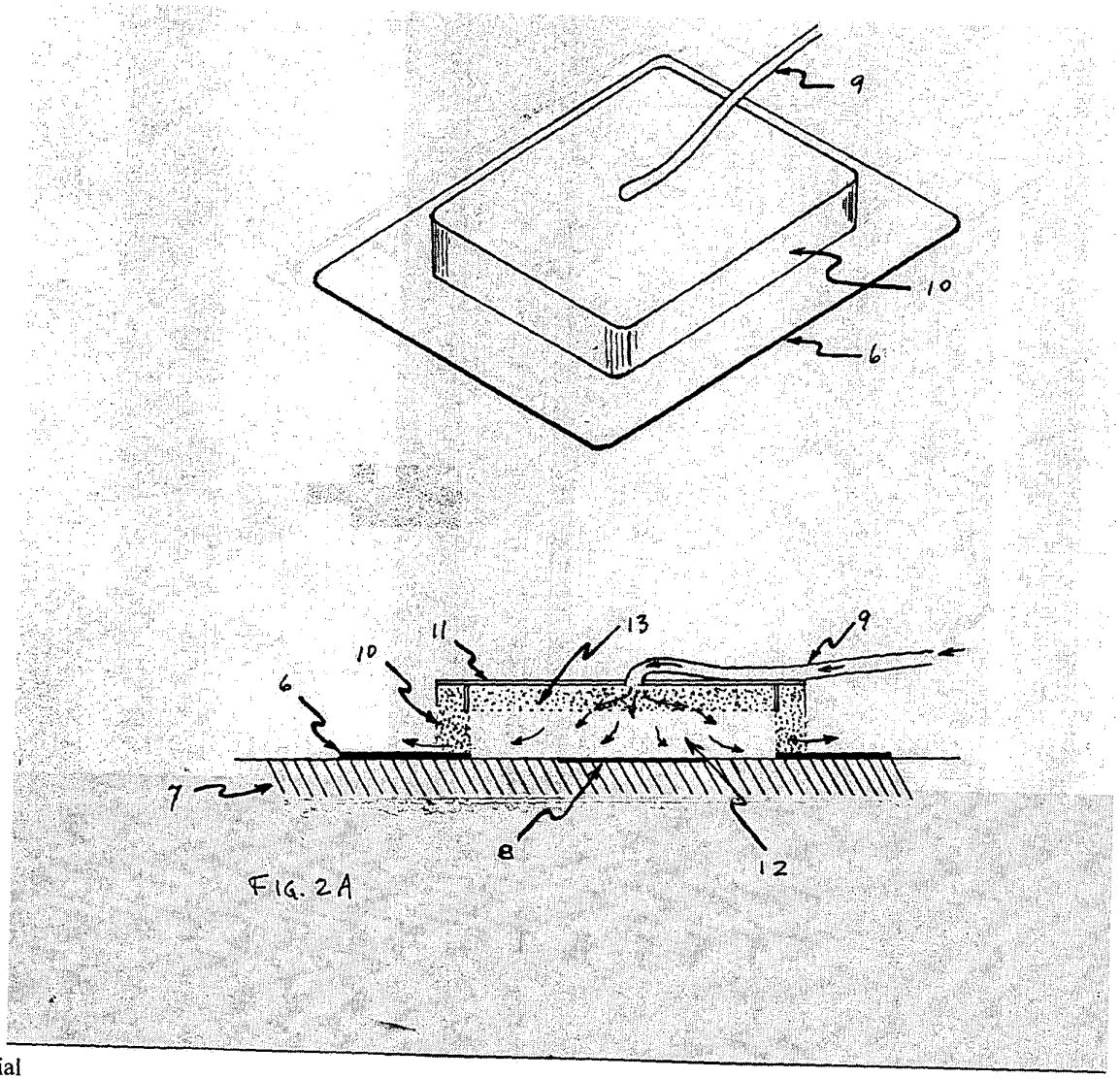


FIG. 2A

Figure 3

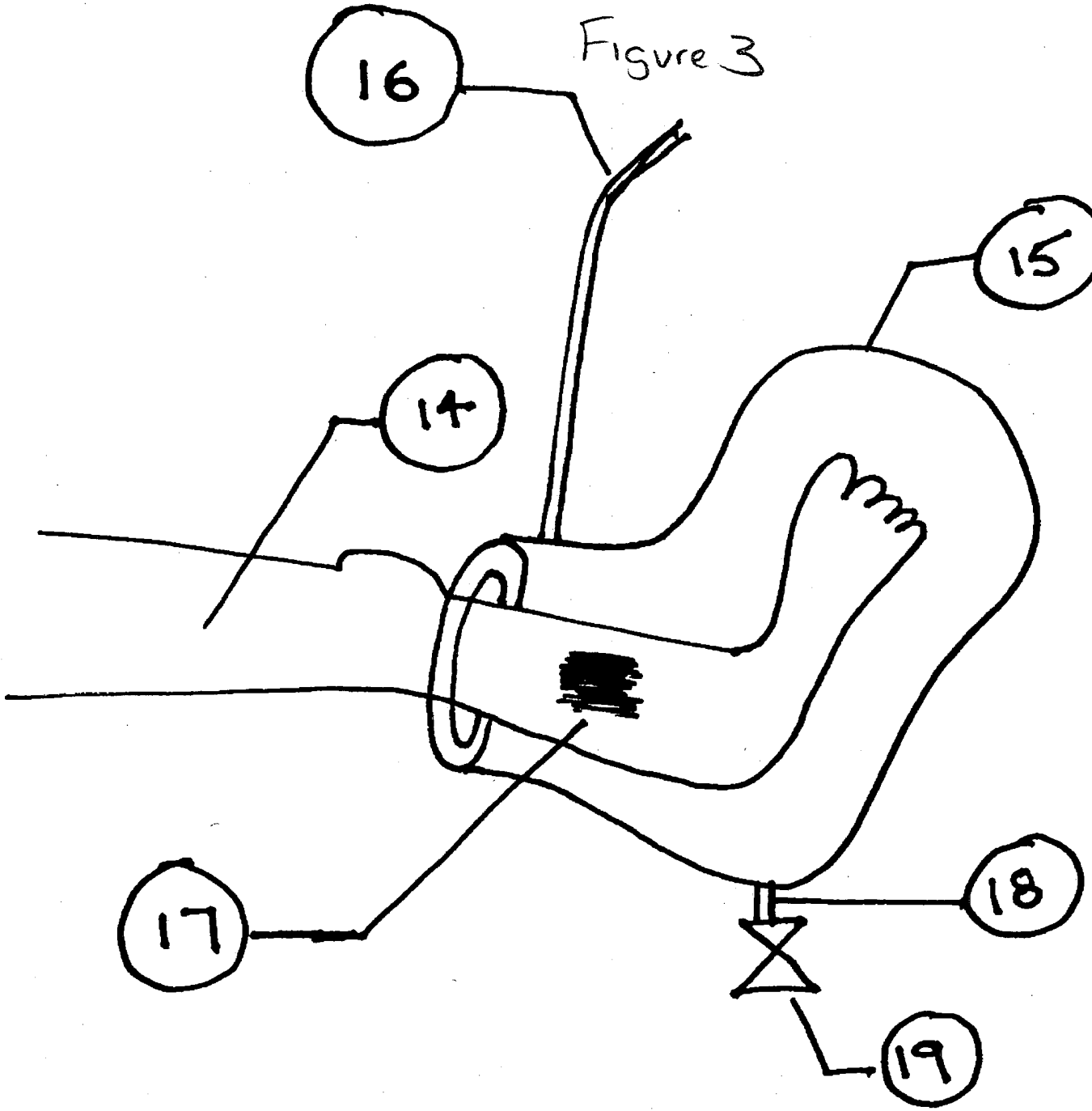


Figure 4

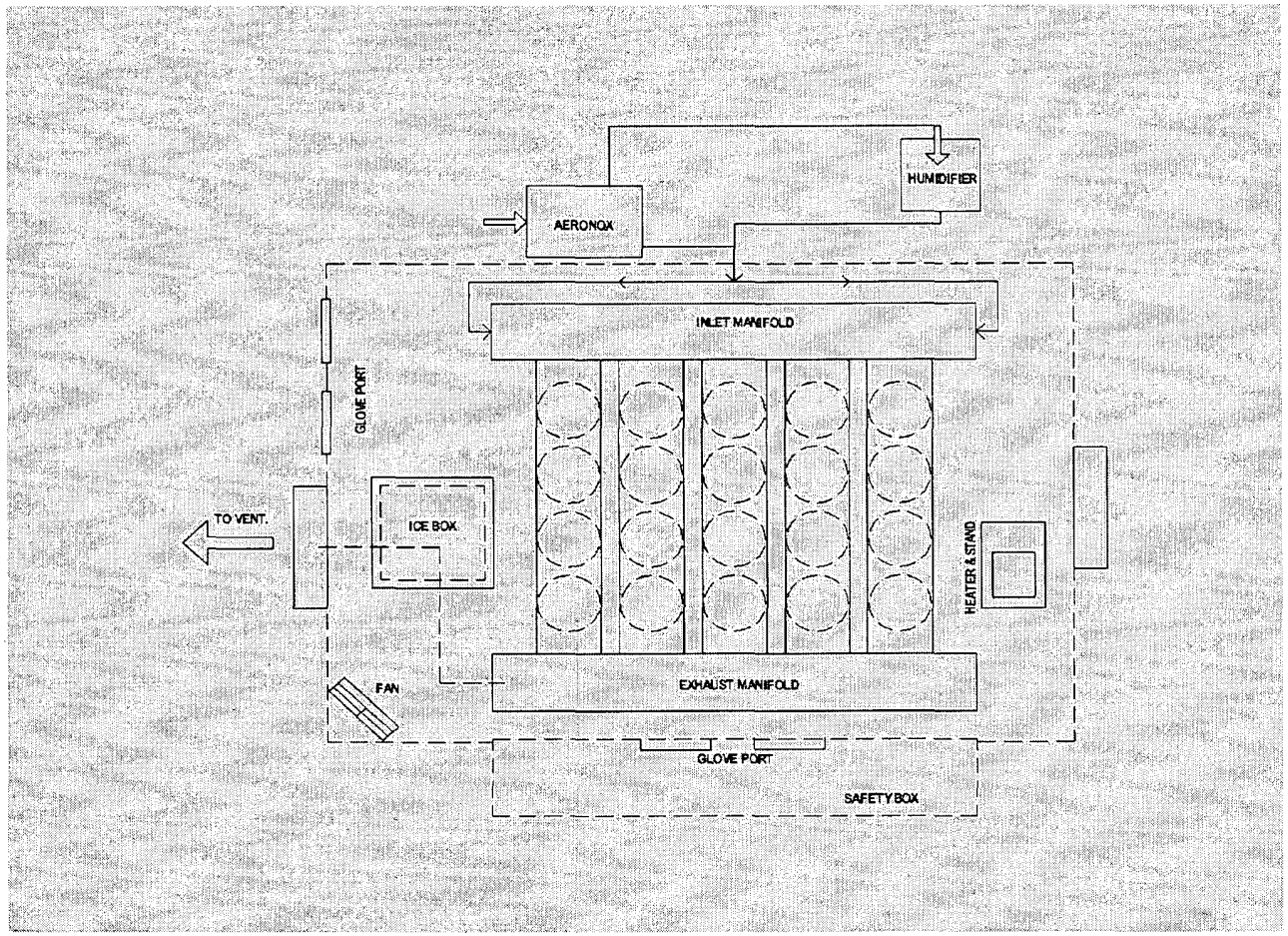
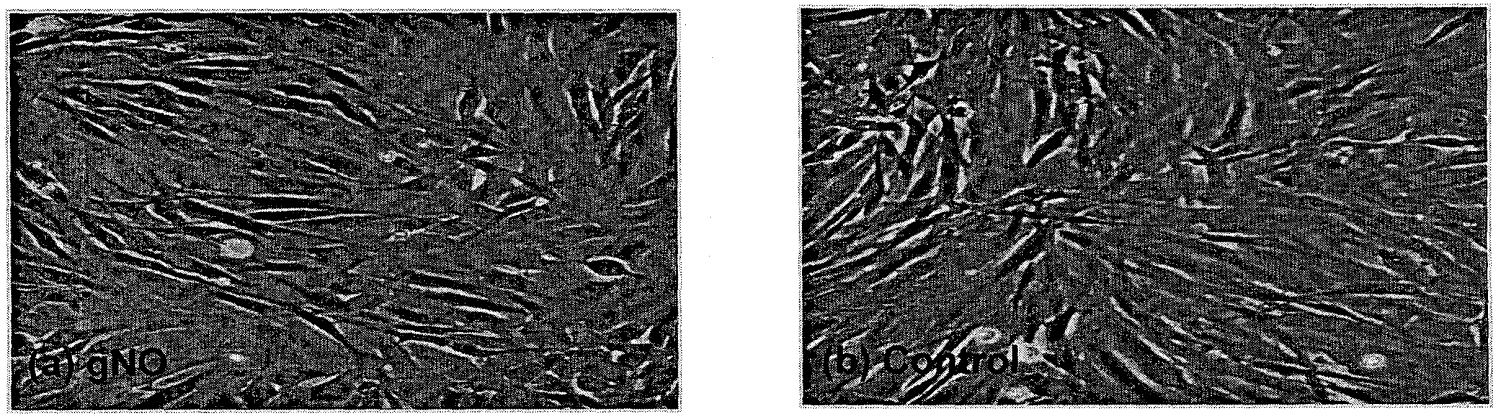
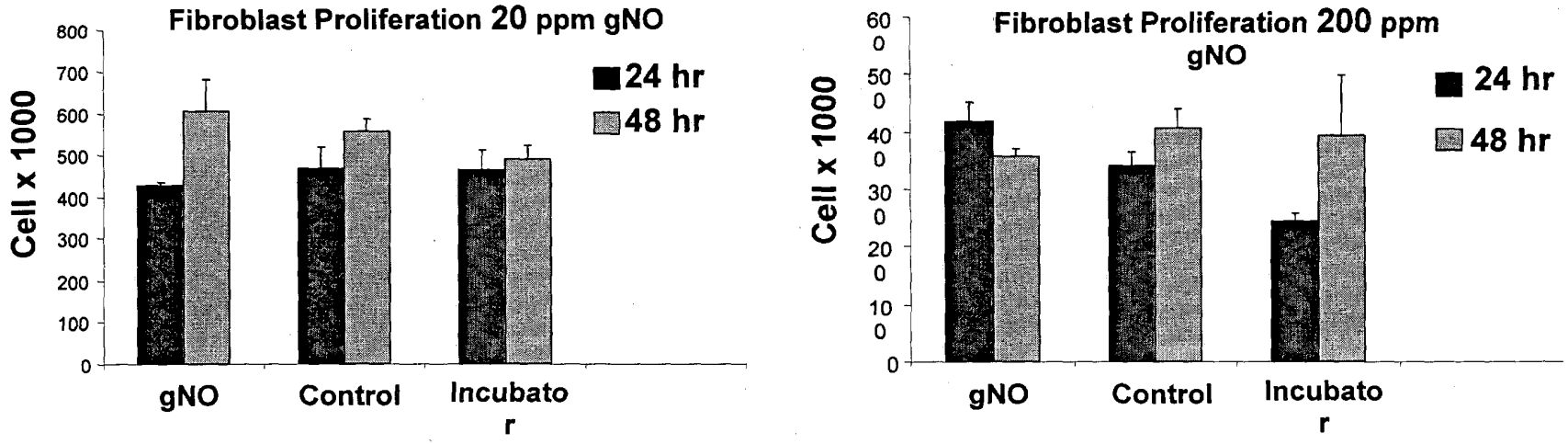


Figure 5



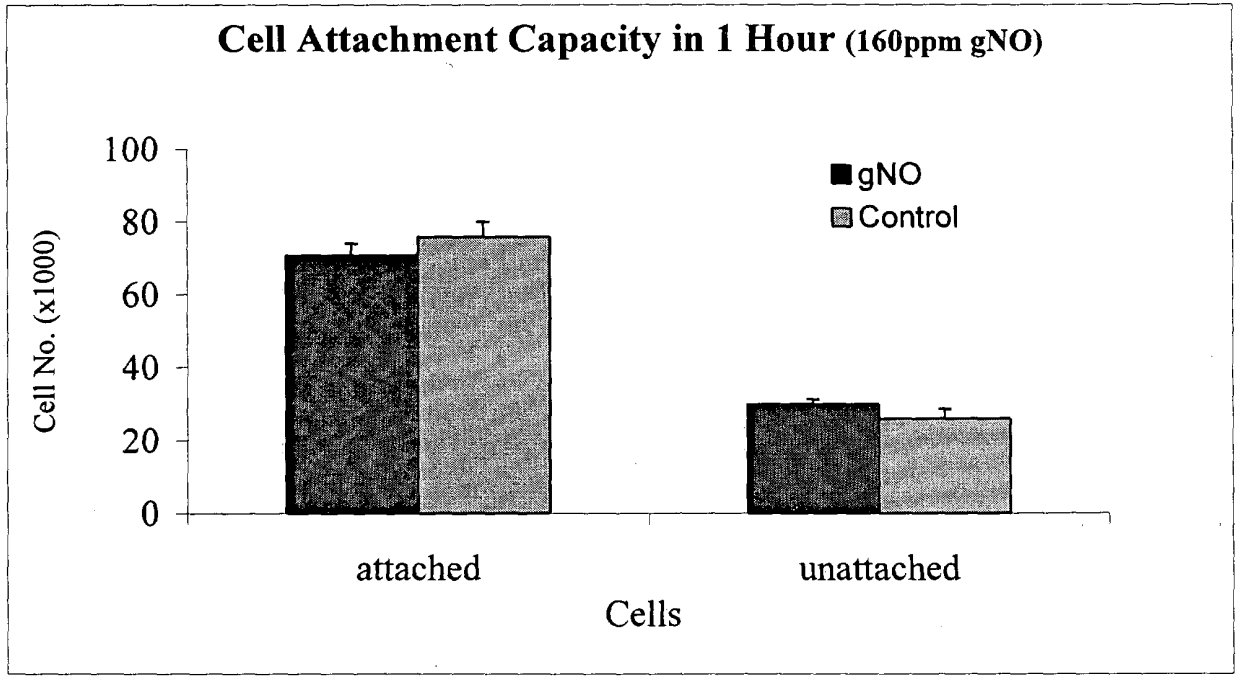
Fibroblast cells morphology in presence (a) and absence (b) of exogenous nitric oxide gas. 40X, Inverted Microscope. No toxic effect is observed in morphology and shape of the fibroblast cells.

Figure 6



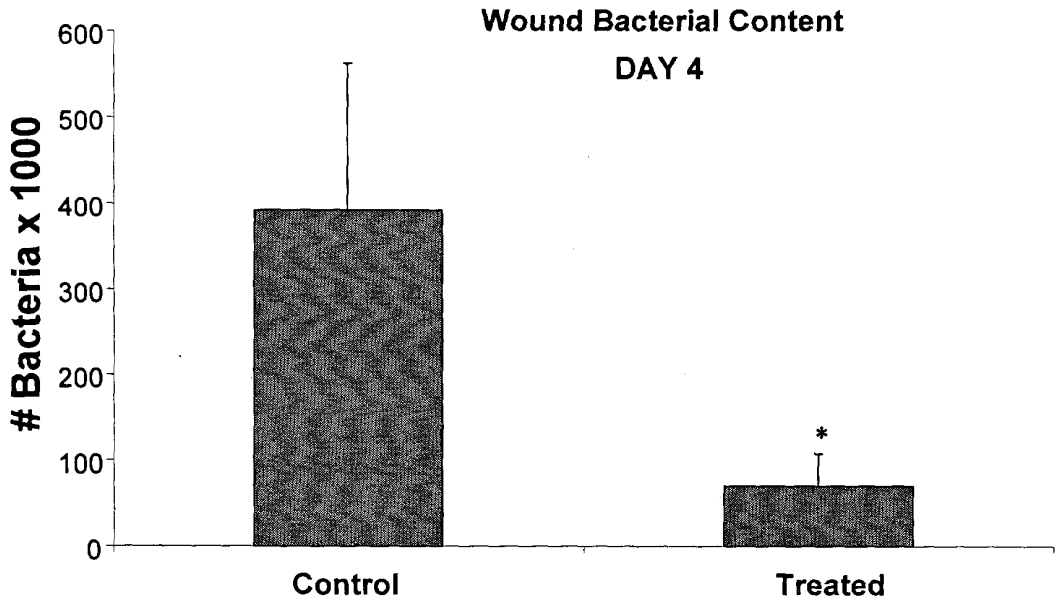
Proliferation Assay: Cell Growth & Viability: Proliferation assay indication fibroblast cell viability following 24 and 48 hours exposure to 20 and 200 ppm gNO. Cell count by Hemacytometer. gNO: cells exposed to gaseous nitric oxide. Control: cells exposed to air, 5% CO_2. Incubator: cells grown inside a conventional tissue culture incubator exposed to air and 5% CO_2. No significant difference is observed in cell proliferation during gNO therapy.

Figure 7



Cultural Plate Efficiency (1 hour). Cell count by Hemacytometer. ($p > 0.05$)

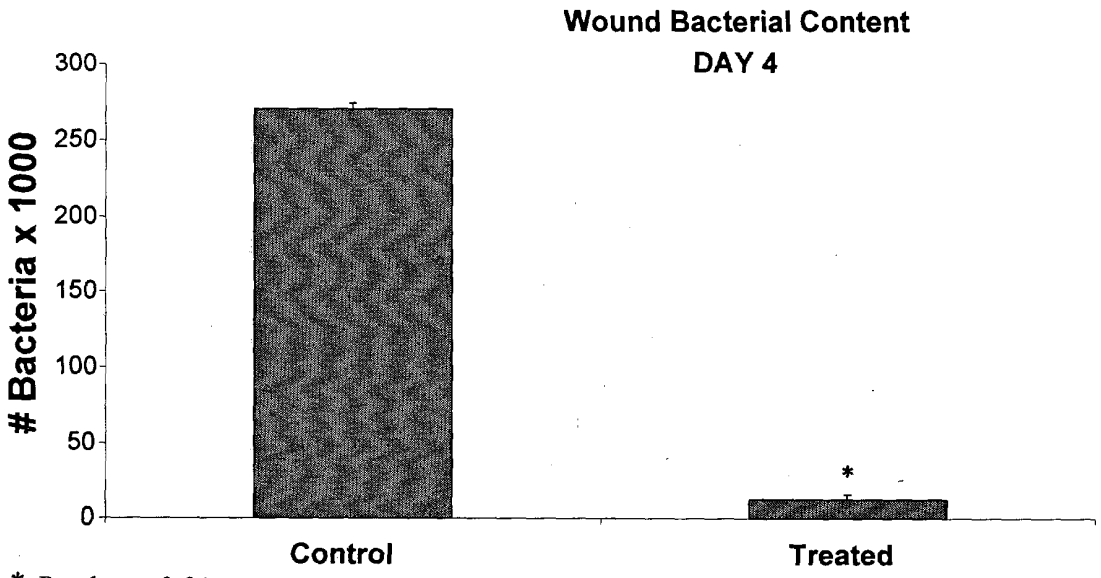
Figure 8



* *P* value < 0.01

Bacterial load in punch biopsies obtained from infected wounds to staphylococcus aureus following 4 days continuous exposure to 200 ppm gNO in an rabbit wound model.

Figure 9



* P value < 0.01

Bacterial load in punch biopsies obtained from infected wounds to staphylococcus aureus following 4 days continuous exposure to 400 ppm gNO in an rabbit wound model.

Figure 10

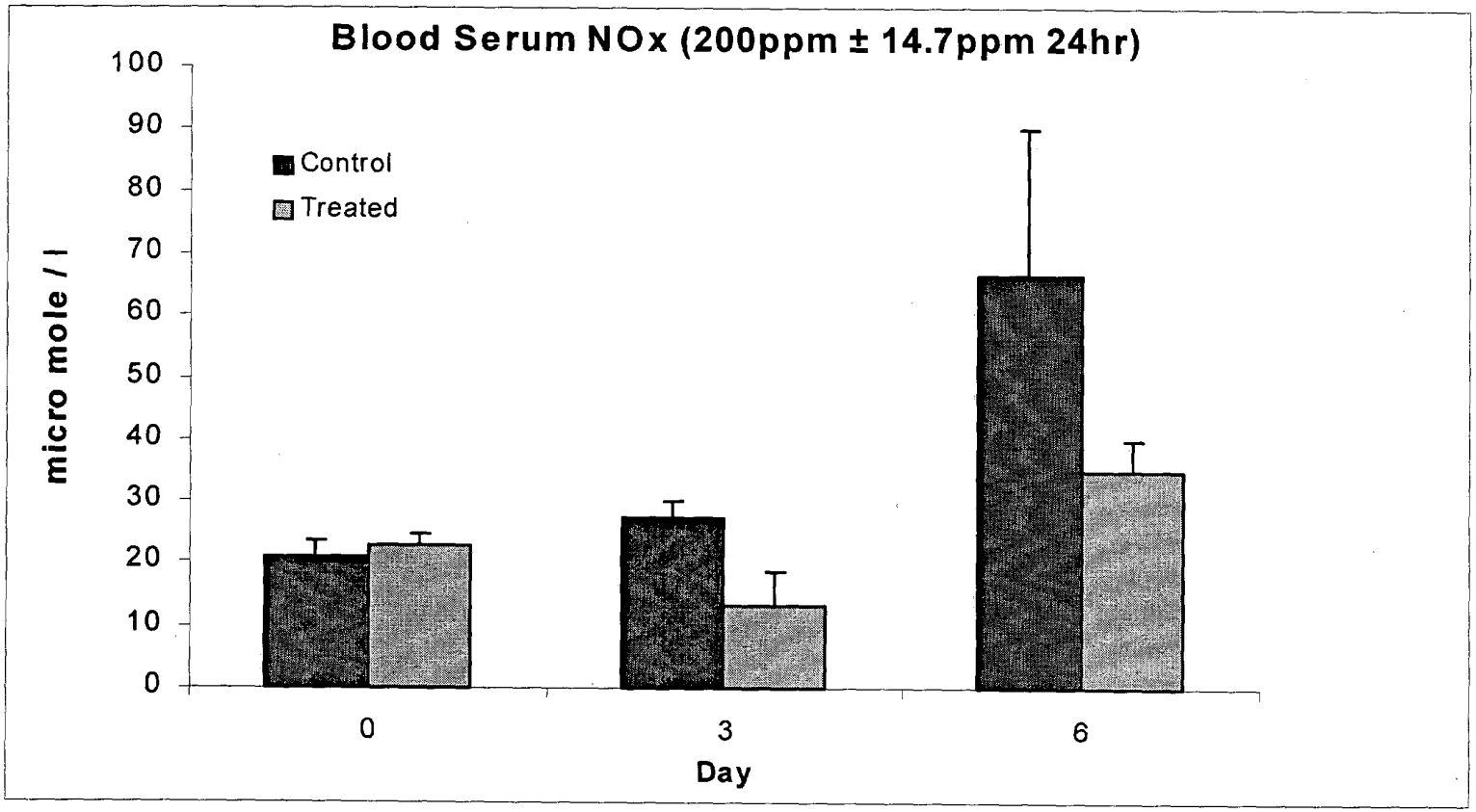
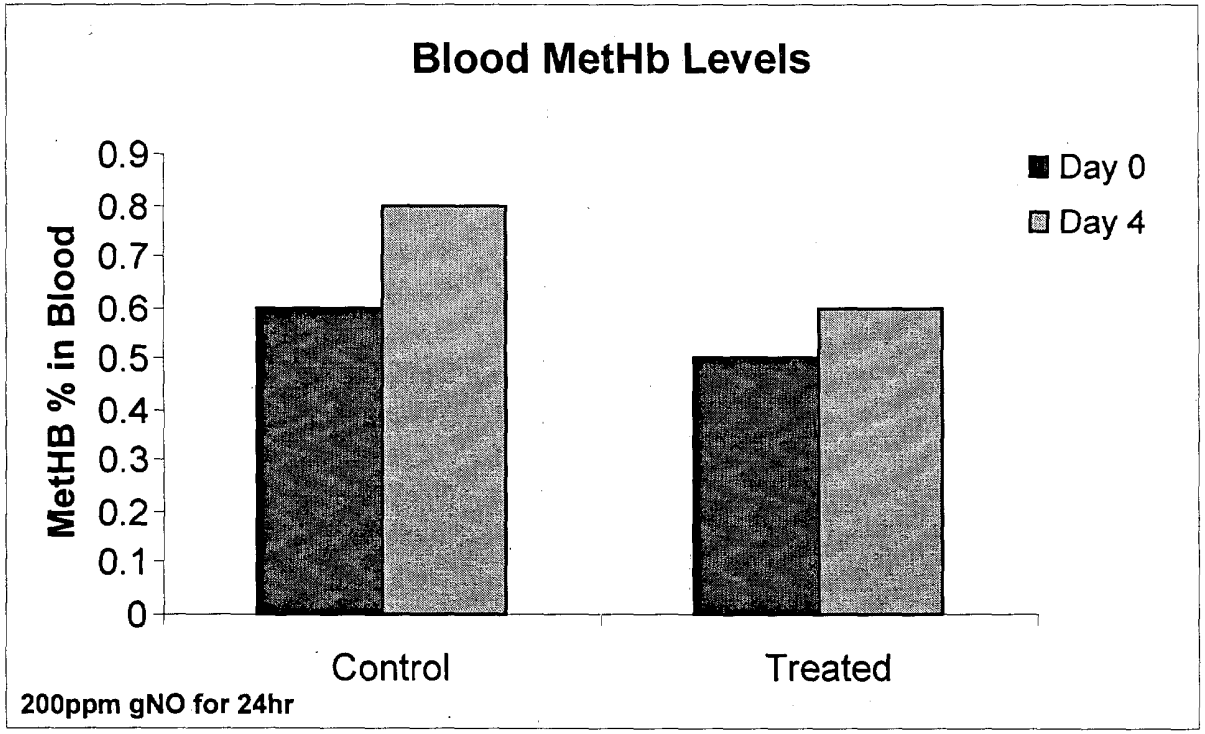


Figure 11



Rabbit blood methemoglubin levels measured by an oxymeter machine following exposure to 200 gNO for 24 hour continuously.

Figure 12

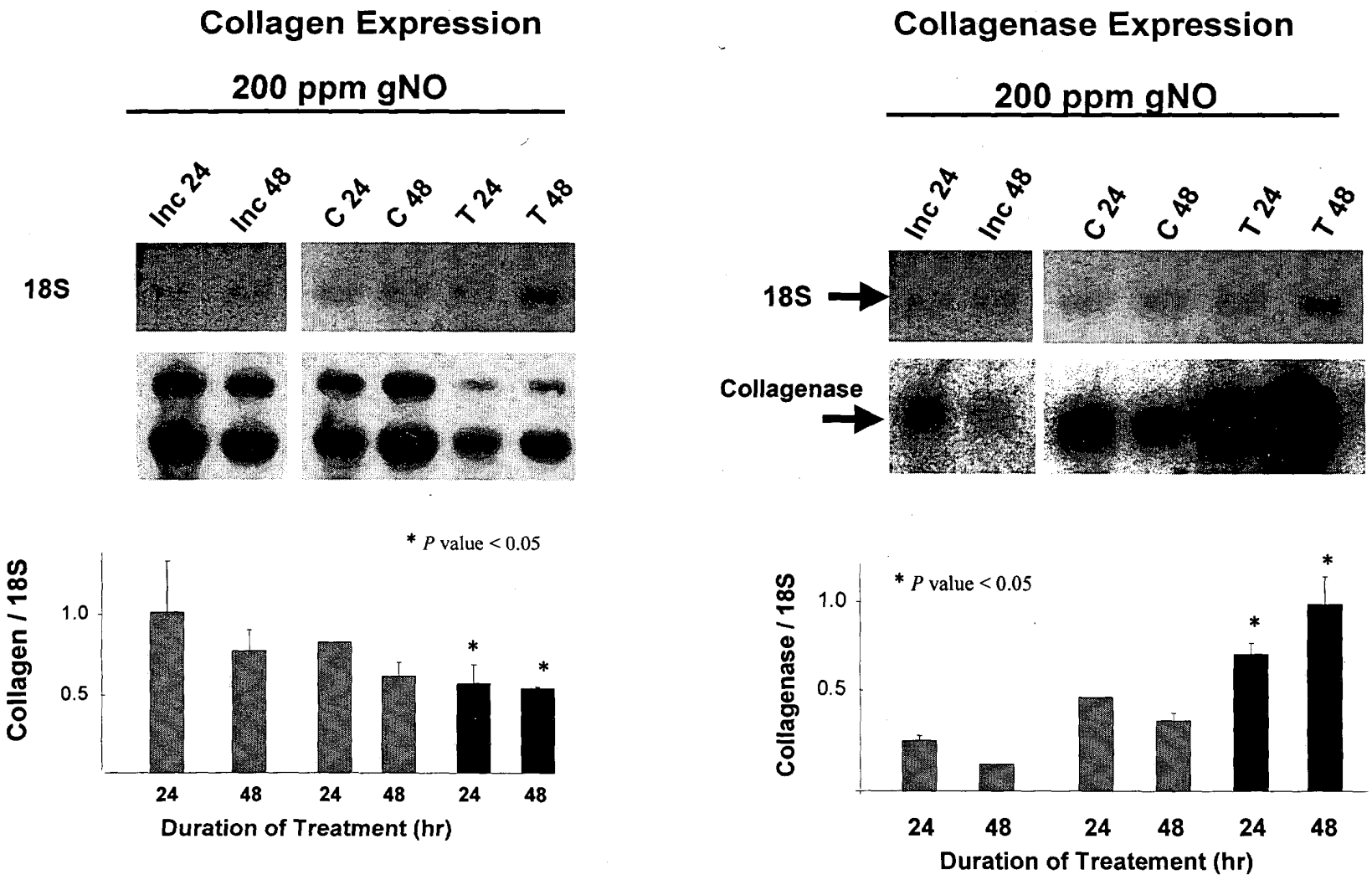
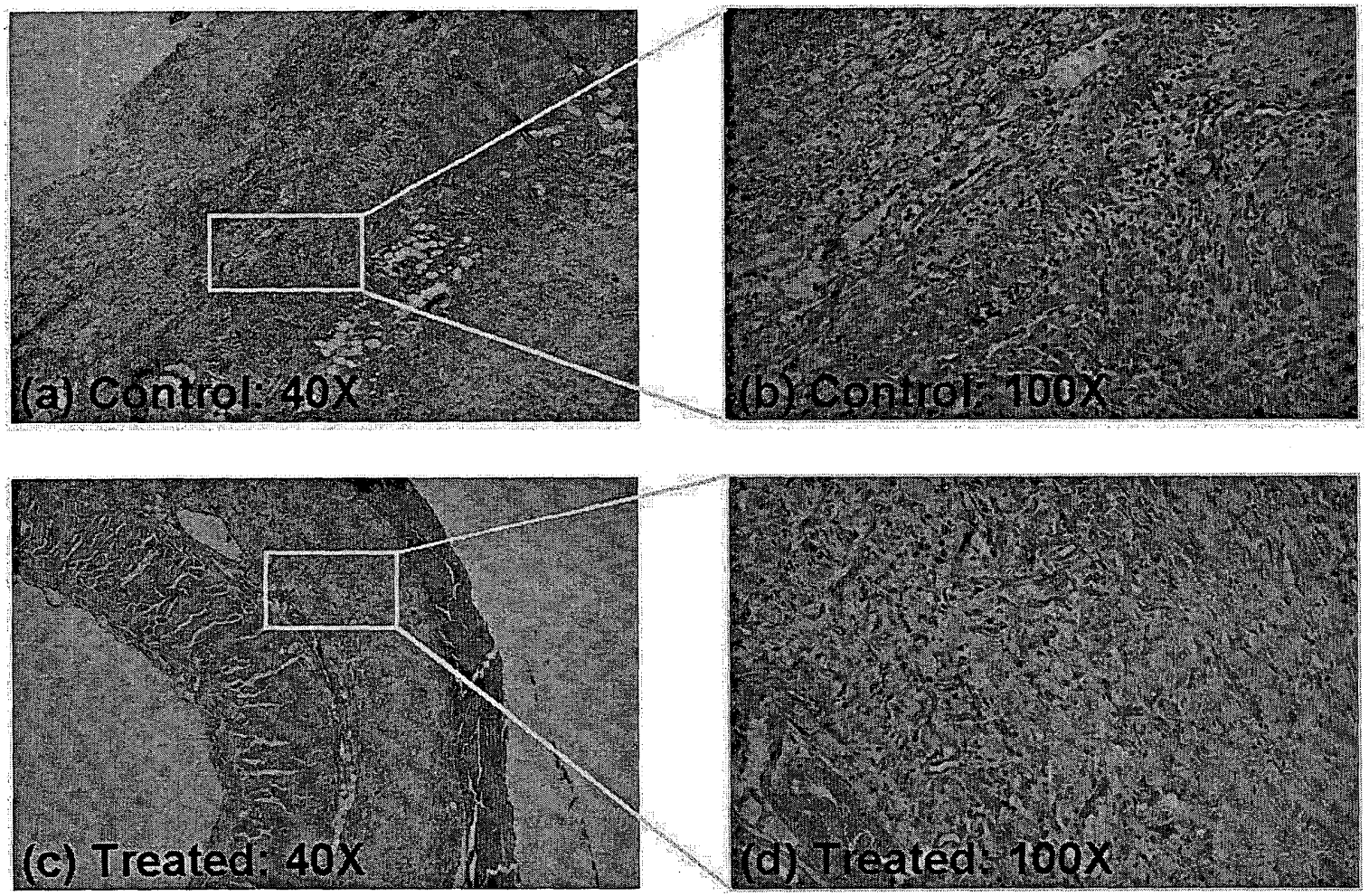


Figure 13



Control: (40X) marked & visible inflammatory reaction seen (hemotox + eosin stain) on both superficial to cutaneous muscle as well as deep in the skin tissue. Also hemorrhage is visible on both side of cutaneous muscle. (100X) Massive infiltration of inflammatory cells as body responds to infection. Scab is not present, open wound. Treated: (40X & 100X) same degree of reaction and hemorrhage is not seen in gNO treated tissue. The severe inflammatory component is missing from treated tissues. Wound is closed by formation of scab.